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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,302

12/12/2005

Markus Schafheutle

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23416 7590 04/02/2007  
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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT

PAPER NUMBER

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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# Office Action Summary

Application No.

10/560,302

Applicant(s)

SCHAFHEUTLE ET AL.

Examiner

Patrick D. Niland

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/05</u> . | 6) <input type="checkbox"/> Other: ____  |

1. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear what the scope of "aldehyde-like" and "ketone-like" are. It would appear that a moiety is either ketone or aldehyde or not. It is therefore unclear what is intended by the modifier "like", more specifically what other moieties are considered to be "aldehyde-like" and "ketone-like".

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by CA 2219835 Kokel et al..

Kokel discloses the instantly claimed polyurethane dispersion and diamine or dihydrazide curing agents at the abstract; claims 1-12, particularly 2, 4, 5, 8 which fall within the scopes of the instant claims 1, 2, 3, and 7. It is noted that polyol b1 of Kokel is polymeric and therefore possesses molecules of varying molecular weights and functionalities based on the definitions of average molecular weight and average functionalities in polymers. Therefore these compounds

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possess the different molecules falling within the scope of the instantly claimed reactants E and H of claims 1 and 3. Page 1, lines 1-35 falls within the scope of F of claims 1 and 7. Page 2, lines 1-10 falls within the scope of the functionality of claim 7. Page 7, line 3 to page 32, line 34 encompasses the instantly claimed inventions. Particularly page 9, lines 25-41 and page 10, lines 1-10 falls within the scope of the instantly claimed components A, B, C, D, and E, page 11, lines 25-40; page 12, lines 1-41; page 13, lines 10-40; page 15, lines 1-9, 21-24 of which the last line has two different reactivities to NCO and fall within the scope of G; page 16, lines 1-8 which falls within the scope of the instantly claimed component G, and lines 11-40, which falls within the scope of the instantly claimed component D; page 19, lines 1-41; page 21, lines 28-40, which falls within the scope of the instant claims' component I, including those of claim 6; page 22, lines 1-41, of which the amine of lines 29-30 falls within the scope of the amino resin of the instant claim 10 as do the compounds of page 24, lines 11-20; and the rest of the document. The reference is silent regarding Staudinger index of the instant claim 8. The burden is on the applicant to show that the prepolymer of the reference does not necessarily have a Staudinger index within that of the very broad range of claim 8 necessarily and inherently due to the otherwise similar nature of the prepolymers of the reference to those of the instant invention and the extreme breadth of the instantly claimed range of claim 8 and because the PTO has no facilities to make such determinations. Note page 20, lines 1-13. Since the dispersions of Kokel otherwise contain the moieties required by the instant claims they are expected to be "self-crosslinking" as used in the instant claims.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over CA 2219835 Kokel et al..

Kokel discloses the instantly claimed polyurethane dispersion and diamine or dihydrazide curing agents at the abstract; claims 1-12, particularly 2, 4, 5, 8 which fall within the scopes of the instant claims 1, 2, 3, and 7. It is noted that polyol b1 of Kokel is polymeric and therefore possesses molecules of varying molecular weights and functionalities based on the definitions of average molecular weight and average functionalities in polymers. Therefore these compounds possess the different molecules falling within the scope of the instantly claimed reactants E and H of claims 1 and 3. Page 1, lines 1-35 falls within the scope of F of claims 1 and 7. Page 2, lines 1-10 falls within the scope of the functionality of claim 7. Page 7, line 3 to page 32, line 34 encompasses the instantly claimed inventions. Particularly page 9, lines 25-41 and page 10, lines 1-10 falls within the scope of the instantly claimed components A, B, C, D, and E, page 11, lines 25-40; page 12, lines 1-41; page 13, lines 10-40; page 15, lines 1-9, 21-24 of which the last line has two different reactivities to NCO and fall within the scope of G; page 16, lines 1-8 which falls within the scope of the instantly claimed component G, and lines 11-40, which falls within the scope of the instantly claimed component D; page 19, lines 1-41; page 21, lines 28-40, which falls within the scope of the instant claims' component I, including those of claim 6; page 22, lines 1-41, of which the amine of lines 29-30 falls within the scope of the amino resin of the instant claim 10 as do the compounds of page 24, lines 11-20; and the rest of the document. The reference is silent regarding Staudinger index of the instant claim 8. The burden is on the applicant to show that the prepolymer of the reference does not necessarily have a Staudinger index within that of the very broad range of claim 8 necessarily and inherently due to the otherwise similar nature of the prepolymers of the reference to those of the instant invention and the extreme breadth of the instantly claimed range of claim 8 and because the PTO has no

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facilities to make such determinations. Note page 20, lines 1-13. Since the dispersions of Kokel otherwise contain the moieties required by the instant claims they are expected to be "self-crosslinking" as used in the instant claims.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the above discussed combinations of ingredients in the coatings of Kokel because they are encompassed by Kokel and would have been expected to give the benefits disclosed by Kokel. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the compounds of the instant claim 5 to give curing moieties to the polyurethane of Kokel because these compounds are known for use in aqueous polyurethanes as stated at page 5, lines 19-27 of Kokel and the problems associated therewith can be overcome by using catalysts to speed their reaction as taught by Kokel at page 24, lines 33-35 or those moieties known for cold curing as taught at page 25, lines 31-32 and by minimizing those groups which give the other problems of these types of crosslinking moieties.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland  
Primary Examiner  
Art Unit 1714